

28 & 30 July 2020

Signs start/end of drought

- Seeing things green up and reservoirs filled. Snowpack in the mountains, paying attention to that.
- With widely variables years with high summer and winter temperatures that fluctuate periods of cold and wet, it makes it hard to know when a drought is over. There seems to be instant relief when rains come and streams fill but at the same time, you are seeing longer term impacts, e.g. trees dying. Yes, it's raining but it is still a drought. This makes the messaging challenging. It's raining now, but the trend is dry.
 - This year Washington had its wettest June in 14 years and Oregon had its fastest snowpack melt off recorded.
- Lack of snowpack
- Timing of rainfall (coast range lacks data and modeling). Many risks exist and lack of info challenges the ability to prepare. Window of rainfall shifting to fewer months with a longer drying period. Stream temperatures track with air temperatures, so warmer nights can really negatively impact temps. Fog losses can exacerbate warming.
- Precipitation deficit
- Low probability of recovery (future rain over a specific timeframe). The further into the summer season, the lower the probability. In the future, this could diminish further.
- Tree growth decreases
- Watch snowpack development, temperatures, rate of meltdown, streamflow conditions (NRCS SNOTEL)
- o Reservoir levels (teacup diagrams) to see how much water is available.
- Extreme precipitation events is making it more challenging to know when a drought ends as one major storm doesn't alleviate drought though the numbers may suggest otherwise. Thus, streamflow and temperature are important.
- If there is a dry, fall/winter then unlikely to recover from drought by end of calendar year.
- Starting / in a drought: dry soil profiles, dry/brown grass earlier than expected.
- Wildland fire in summer
- o Reservoir, snow, outlooks for fire weather
- o Average rainfall, past information and how it compares to where we are now.
- Snow droughts occur when precipitation falls as rain rather than snow so that water isn't available later in the season.
- o Idaho's water supply is 80-90% dependent on snowpack versus rain.
- o Drought can occur due to lack of snow and normal amount of rain precipitation.